APPENDIX C

Pine Street Barge Canal Coordinating Council Progress Update #1

March 1994

John Akey Community Representative (802)863-1765

Ken Carr U.S. Fish & Wildlife Service (603)225-1411

Susan Compton City of Burlington (802)863-4531

George Desch Vt. Dept. of Env. Conservation (802)241-3888

Sheila Eckman Environmental Protection Agency (617)573-5783

Marty Feldman Pine Street Arts & Business Assoc. (802)658-6815

Lori Fisher Lake Champlain Committee (802)658-1414

Ross Gilleland Environmental Protection Agency (617)573-5766

William Howland Lake Champlain Committee (802)388-3711 x5210

Martin Johnson Potentially Responsible Parties (802)229-4600

Gary Kjelleron Potentially Responsible Parties (802)657-6876

Sheri Larsen Potentially Responsible Parties (802)863-4511

Philip J. Harter Facilitator (802)763-2835

Council moving ahead on further studies for Pine Street

This Progress Update is the first of several reports the Coordinating Council will be making to keep interested citizens informed about activities at the Pine Street Barge Canal Superfund Site.

The Pine Street Barge Canal Coordinating Council is a coalition of community, government and business members whose immediate goal is to reach agreement by consensus on what studies need to be done on the Pine Street Barge Canal Superfund Site in Burlington, Vermont. Ultimately, the Coordinating Council hopes to develop a solution for the site that is acceptable to the community, is

If the Coordinating
Council approach is successful in Burlington, the
process may be duplicated
around the country at other
Superfund locations.

based upon sound science, and meets state and federal requirements. This collaborative effort in which the interested parties seek common ground is a clear departure from the adversarial approach often taken in the past on environmental matters.

Using such broad community involvement is a new idea, and the Barge Canal site is considered a pilot project. If the Coordinating Council approach is successful in Burlington, the process may be duplicated around the country at other Superfund locations. The community has worked hard to organize a Vermont response to the Barge Canal problem, and now has the opportunity to be directly

involved in effecting an environmentally sound and cost-effective solution.

The Coordinating Council was organized in the summer of 1993 after the EPA withdrew its proposed remediation plan for the site in June 1993. Public opposition to the proposed plan led to the discussions that have

See COUNCIL, page two

Champlain Parkway given priority

The Coordinating
Council has agreed to work
with the City of Burlington,
the Vermont Agency of
Transportation and Vermont Railway if a decision
is made by the three agencies to build a Champlain
Parkway interim highway.
The detour would cut across
a corner of the Pine Street
Superfund Site at the
Burlington Street Department property.

The current proposal for the Champlain Parkway involves an alignment that uses Lakeside Avenue, Pine Street and portions of the **Burlington Street Depart**ment and Vermont railway properties. If the proposed plan for the highway is approved, any potential contamination on the Street Department property would be addressed ahead of the rest of the Superfund site, thus allowing the roadway to be built and used while the remaining site is evaluated.

Resolving ecological, human health issues

The central goal of the Coordinating Council is to identify the technical questions and data gaps that need to be resolved in order to determine what remedial action is needed at the Pine Street Barge Canal Site. To facilitate this process, a Technical Issues Work Group has been created. The Work Group has representation from the Potentially Responsible Parties (PRPs), EPA, State of Vermont, U.S. Fish and Wildlife Service, the City of Burlington, and the Lake Champlain Committee.

The Work Group has been meeting since mid-November 1993 to identify relevant technical issues. The first task tackled by the Work Group has been to review public comments received by the EPA during the Public Comment Period. Working from these comments, the Work Group has incorporated a list of potentially relevant issues and/or data gaps into a working document called the "Technical Issues Document". This document will

be debated and amended during Work Group and Coordinating Council meetings.

The issues identified in the Technical Issues Document fall into four major categories: Human Health impact, Ecological Risks, Fate & Transport of Contaminants, and Remedial Alternatives. In order to address these topics the EPA, the PRPs, and the Lake Champlain Committee have assembled teams of technical experts in each of these subject areas.

The Human Health and technical experts began meeting in early March. The Ecological Risk and Fate & Transport technical experts will begin meeting in March, and the Remedial Alternatives technical experts will begin meeting in May. The resulting product from each group of technical experts is a draft "Statement of Work" for that particular technical subject. The Coordinating Council will review and approve the separate

draft Statements of Work and combine them into an overall Statement of Work composed of all the technical issues that need to be studied.

Under the current schedule, the draft Statement of Work will be completed in August 1994 at which time it will be released for community review and comment. Individual draft Statements of Work for the specific technical topics will be presented to the Council as they are developed and will also be available for review by the community in the context of the Council meetings and its documentation.

The overall Statement of Work will ultimately become an attachment to a legal agreement between the PRPs and the EPA called the Administrative Order on Consent (AOC). The AOC provides the basis for the PRPs to perform the necessary additional studies.

Council, from page one

resulted in the formation of the Coordinating Council. The Council's emphasis on public participation, a neutral facilitator, pooling of data and the combination of all participating parties' scientists should result in a plan for the site that we can all support.

Meetings of the Coordinating Council are open to the public and are announced in advance (see page 3 of this update for a list of upcoming meetings). Comments from the public concerning the Barge Canal are encouraged and can be made at a Coordinating Council meeting or to any Council member. See the back page if you wish to receive meeting summaries.

Legal update

While members of the Coordinating Council's technical work groups collaborate on determining what additional studies need to be done at the site, negotiations have begun that are intended to determine who will fund the work.

The EPA, Vermont Department of Environmental Conservation and the Potentially Responsible Parties (PRPs) met in early February to initiate an agreement under which the PRPs would fund or perform additional studies at the site. The scope of the additional studies will be agreed upon by the Coordinating Council in the coming months.

In the next month, the PRPs will be meeting to determine how to allocate among themselves the costs of the site studies and any necessary cleanup activities. The talks will run concurrently with the Coordinating Council's discussions and decisions on technical issues, and therefore won't delay additional studies or potential clean up activities.

What's next ...

The following is a schedule of all the Coordinating Council meetings for the next five months. All sessions begin at 5:30 p.m., and, unless stated otherwise, will be held at Burlington Electric Department, 585 Pine Street, Burlington, Vermont.

The results of the Technical Work Group meetings held during the day are summarized at each evening Coordinating Council meeting. For a listing of the scheduled Work Group meetings (which are also open to the public) and locations, please contact the facilitator or any Council member.

Finally, please note that this schedule is subject to change. You may contact any Council member to verify meetings.

March 30 Fate & Transport

March 31 Human Health and Ecological Update

April 19 Presentation by George Pinder on Fate & Transport

April 21 Human Health and Fate & Transport Update

May 18-19 Fate & Transport Update June 8-9

Remedial Alternatives Update Green Mountain Power, 25 Green Mountain Power Dr., South Burlington

June 28-29 Discuss Statement of Work

July 13-14
Statement of Work
Green Mountain Power,
25 Green Mountain Power Dr.,
South Burlington

August Public comment period on draft Statement of Work



Coordinating Council members deliberate on an Issue.

Community participation encouraged

An objective of the Coordinating Council is to increase general community involvement up front in the process.

All Coordinating Council and Technical Work Group meetings are open to the public. Council meetings are held in the evening in order to enable more citizens to attend. The results of the day Work Group meetings are summarized at the Council meetings. Advance notice will be provided on the upcoming Council meetings that focus on the Council's study recommendations for Human Health, Ecological Risks and Fate & Transport of Contaminants. When the draft Statement of Work has been prepared, the Council will hold an informational meeting and public comment period to solicit community input.

Written meeting summaries of all the Coordinating Council meetings are available at the repositories at the University of Vermont and Fletcher's Free Libraries in Burlington, and also the EPA Records Center in Boston. Videotapings of Coordinating Council meetings held after March 31 will be available at the Burlington libraries.

Community Outreach

Council members have sent out letters, surveyed meeting attendees, held informational meetings, and made presentations on current issues in an effort to meaningfully involve the community in developing a new cleanup plan for the site. If you would like to have a presentation made to your group or if you have suggestions for ways we can keep you abreast of our progress, please contact a Council member (see page 1 of this Progress Update for names and phone numbers).

Mailing list questions?

copies of periodic Progress Updates, and relevant media releases - enough information to keep most people current with the issues. Those who would like additional information can be added to the "Coordinating Council Mailing List" and receive all the Council's meeting summaries. (If you received this Progress Update in the mail, you are already on one of the mailing lists. Please check your address label: a "CC" indicates that you are on the Coordinating Council Mailing List; otherwise you are on the Pine Street Mailing List.) I would like my name placed on the Pine Street Mailing List I would like my name placed on the Coordinating Council Mailing List Please check the box of the mailing list you would like to be on and mail this form to: Pine Street Barge Canal Coordinating Council PO Box 4632 Burlington, VT 05406-4632 NAME. ADDRESS. CITY, STATE, ZIP CODE Pine Street Barge Canal Coordinating Council PO Box 4632 Burlington, VT 05406-4632

The Coordinating Council maintains two mailing lists. People on the "Pine Street Mailing List" receive



Pine Street Barge Canal Coordinating Council Progress Update #2 October 1994

John Akey Community Representative (802)863-1765

Ken Carr U.S. Fish & Wildlife Service (603)225-1411

Susan Compton City of Burlington (802)863-4531

George Desch Vt. Dept. of Env. Conservation (802)241-3888

Sheila Edkman Environmental Protection Agency (617)573-5783

Marty Foldman Pine Street Arts & Business Assoc. (802)658-6815

Lori Fisher Lake Champlain Committee (802)658-1414

Ross Gillefand Environmental Protection Agency (617)573-5766

William Howland Lake Champlain Commitee (802)388-3711 x5210

Martin Johnson Potentially Responsible Parties (802)229-4600

Gary Kjelleren Potentially Responsible Parties (802)657-6876

Sheri Larsen Potentially Responsible Parties (802)863-4511

Philip J. Harter Facilitator (802)763-2835

The Pine Street Coordinating Council represents a first-of-its-kind effort that includes a diverse cross section of local ditzens, environmental groups, the potentially responsible parties and local, state and federal representatives working together to reach consensus on issues of concern at the site. If the Coordinating Council approach is successful in Burlington, the process may be duplicated around the country at other Superfund locations.

New studies underway at Pine Street Barge Canal Site

This Progress Update is the second of several reports the Coordinating Council will be making to keep interested citizens informed about activities at the Pine Street Barge Canal Superfund Site.

Field teams have started in on a new round of studies that are designed to fill in data gaps concerning the Pine Street Superfund Site. Contractors for the potentially responsible parties moved a trailer and various testing equipment on the site in early September and began testing soon afterward.

The studies will build upon the data the Environmental Protection Agency collected during its original assessment of the site from 1989 through 1992. Pine Street Coordinating Council members and their scientific experts have been meeting several times a month for the past year to determine what additional studies need to be conducted before deciding on a new

Public meeting set for November

The Pine Street Coordinating Council will host a public meeting beginning at 7 p.m. Nov. 15 at the Contois Auditorium in the Burlington City Hall to discuss progress at the site and to field any questions from the audience. Community attendance is strongly encouraged. For more information, contact one of the council members listed on the left.

plan that is acceptable to the community, is based on sound science and meets state and federal requirements.

The studies have been designed to answer the following questions:

See Council, page two



Two scientists come ashore after taking sediment samples from the Pine Street Barge Canal.

Council, from page one

1) Is the site contamination affecting Lake Champlain?

To answer this question, scientists will measure groundwater levels for one year to evaluate groundwater flow directions across the site. In addition, groundwater samples will be collected and analyzed from the area between the canal and the lake using a device that allows for the discrete sampling of groundwater at different depths. This study will test the hypothesis that a groundwater divide between the canal and the lake prevents contaminated groundwater from reaching the lake. Field teams will also be testing to determine whether contaminated sediments are moving from the canal during a storm.

2) Is the air safe to breathe under current undisturbed conditions?

In 1992 the EPA determined that it was very unlikely for the contaminants to pose a threat to human health by being released

See page 4 for an introduction to the scientific experts working behind the scenes

into the air. This position is generally accepted by the scientists of the Coordinating Council; however, because of the strong public concern, a study will be performed to collect further air samples during "worst case" meteorological conditions: warm temperatures and calm atmosphere. When deciding on a remedy, concerns relating to air

emissions from the remedy will be carefully evaluated.

3) Does the contaminated soil pose a risk to people on the site?

Although the site is not used extensively, the possibility exists that people could come in contact with the shallow soils. Approximately 50 soil samples will be taken in the more accessible areas and in an area of stressed vegetation and stained soil. These soil samples will be screened for contaminants and this data will be used to insure that occasional use of the site will not present a risk to human health. This information will also allow for localized cleanup of certain areas if warranted.

See Council, page three



A scientist checks a sampling collection device that measures stormwater discharges into the lake.

Council, from page two

4) How significant is the ecological risk at the site?

The ecological issues work group recommended an evaluation of the toxicity of the shallow soils and sediments, where the vast majority of animals and plants slive. In order to select the optimum locations for the toxicity tests, detailed mapping of the contaminant distribution is to take place. In a cost-saving effort, more than 300 samples will be collected and analyzed at the site with a field screening technique. This will be followed by toxicity tests at specific locations with high, medium and low contaminant levels. The results of these tests will provide relatively detailed understanding of areas where contaminants are affecting the local ecosystem.

5) Is the site "healing" naturally and is the contamination contained?

Natural biological processes are known to provide significant cleanup of a number of different types of contaminated sites. Experts have hypothesized that this type of natural or "intrinsic" . bioremediation is occurring in certain areas of the Pine Street Site. Although it is unlikely that such processes would cleanse the site in the reasonably foreseeable future, there is the possibility that intrinsic bioremediation may contain the contaminants and significantly reduce the ongoing risks to humans and the environment. A preliminary study is proposed to determine if such a process is active at the Pine Street

6) How will these studies relate to an overall remedy selection for the site?

Major concerns expressed by the public in the past have been whether the risk to the environment at the site warrants an intrusive cleanup, and whether such an action can minimize costs and disturbance to the site. The studies mentioned above should address both of these issues.

The soil sampling and followup toxicity tests will use actual site soils to evaluate how much the contaminants are affecting the environment. If no unacceptable effects are found and the site is not affecting Lake Champlain, the remedy will most likely focus on land use restrictions and monitoring. If unacceptable risks to the environment or human health are found through this testing program, the detailed soil data will allow us to focus remediation on the most contaminated areas and result in a less costly, less intrusive remedy than what was proposed in 1992.

The parties funding the investigations have selected The Johnson Company of Montpelier as the contractor to perform the first round of studies. The data generated from these studies will be analyzed and evaluated by these parties and their contractor. The EPA, U.S. Fish and Wildlife Department, the State, the Lake Champlain Committee and the other members of the Coordinating Council and their technical experts will also participate in the evaluation.

On an on-going basis, the Coordinating Council will continue to evaluate alternatives for a remedy for this site, and possibly begin developing details for a particular remedy in 1995 depending upon the results of the additional studies.

'No Fishing' signs posted at canal

City of Burlington Health Officer Steve Goodkind has posted "NO FISHING" signs at the Pine Street Site. The decision to post the site resulted from concerns raised by the Coordinating Council that residents of Burlington were using the site as a fishing area and might be eating fish caught in the Barge Canal.



PER ORDER OF THE BURLINGTON HEALTH OFFICER; FOR MORE INFORMATION CALL 863-9094

Previous studies performed by contractors for the EPA have concluded that there appears to be no human health risk posed by the site. Nevertheless, Goodkind decided to post the signs as a precautionary measure until the remaining site studies are completed and a determination is made as to the potential risks, if any, associated with the contamination at the site. In addition to posting signs at the site itself, notices have been sent to local bait and tackle shops and local markets, in various languages, warning citizens that fishing at the site is prohibited.